

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL)			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	41.350	43.970	35.508	28.566	15.819	11.874	20.762	20.474
K0954/Shipboard EW Improvements	7.068	26.452	33.228	26.074	14.787	10.829	19.700	19.393
K2190 NULKA	4.217	0.992	2.280	2.492	1.032	1.045	1.062	1.081
K2441 Nulka Decoy Improvements		4.499						
K9243 Radar Titles*		*						
		0.977						
K9244 Surface Ship EW Improvements		2.738						
K9245 Improved Control and Display (ICAD)		8.312						
K2309/AIEWS	30.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>This program element consolidates currently ongoing and planned programmatic efforts related to Engage: Soft Kill Electronic Warfare (EW) aspects of Ship Self Defense (SSD) to facilitate effective planning and management of these efforts and to exploit the synergistic relationship inherent in each. Analysis and demonstration have established that surface SSD based on single-sensor detection point-to-point control architecture performs marginally against current and projected Anti-Ship Cruise Missile (ASCM) threats. The supersonic seaskimming ASCM reduces the effective battle space to the horizon and the available reaction time-line to less than 30 seconds from first opportunity to detect until the ASCM impacts its target ship. Against such a threat, multi-sensor integration is required for effective detection, and parallel processing is essential to reduce reaction time to acceptable levels and to provide vital coordination/integration of hardkill and softkill assets.</p> <p>These SSD projects address and coordinate the detect and engage functions necessary to meet the rigorous SSD requirements within a development structure dedicated to systems engineering.</p> <p>*Project Unit K9243 reflects a Congressional Increase for Outlaw Bandit.</p>								

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<p>(U) DETECTION: Improved coordinated sensor performance to increase the probability of detecting low altitude, low observable targets is to be achieved through the synergism gained from the integration of dissimilar sensor sources. Sensor improvements are addressed through the Shipboard EW Improvements (K0954) project. These improvements to both active and passive detection capabilities are complementary to the ship signature reduction technology also being pursued through Shipboard EW (K0954).</p> <p>(U) ENGAGEMENT: The offboard Active Decoy (NULKA, K2190) is a joint cooperative program between the United States and Australia to develop and engage an active offboard decoy which utilizes a broadbend radio frequency repeater mounted atop a hovering rocket. The Decoy is designed to counter a wide variety of present and future radar guided Anti-Ship Missile (ASM) threats by radiating a large radar cross section signal while flying trajectory.</p>		

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL)			PROJECT NUMBER AND NAME K0954/K9244/K9245 Shipboard EW Improvements			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	7.068	37.502	33.228	26.074	14.787	10.829	19.700	19.393
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Surface Electronic Warfare Improvement Program (SEWIP) is an evolutionary acquisition and spiral development program of Block upgrades to the AN/SLQ-32(V) family of passive and active shipboard electronic warfare (EW) systems, which will replace the AN/SLY-2(V) Advanced Integrated Electronic Warfare System (AIEWS) program. AIEWS was cancelled in April 2002 due to cost growth and development delay issues. SEWIP will provide necessary EW capabilities and will incorporate: technology advances as they become available to provide incremental upgrades in capability and improvements in performance; continuous technology reviews; potential alternate element and component surveys; and, ongoing Cost As an Independent Variable (CAIV) efforts will be employed throughout. Threat system technologies will be examined and compared against program planning to achieve best capability within available resources.

The initial SEWIP plan (Block 1, ACAT II) is segmented into 3 sub-blocks: 1A, 1B and 1C. Block 1A is for SLQ-32 sustainment by updating the display console and display/pulse-processing computers, allowing the system to more quickly identify threats and better display the information to the operator. The new display console and processing computers will partially open the system architecture to support subsequent block upgrades. Block 1A is planned to begin at-sea testing in FY04 and to go into production in FY05. Block 1B will add Specific Emitter Identification (SEI) via integration of stand-alone Small Ship Electronic Support Measures (SS ESM), and display of combat systems tracks to the operator to improve threat correlation and situational awareness. Block 1B is planned to begin at-sea testing in FY05. Block 1C will add initial High Gain High Sensitivity (HGHS) capability to SEI, and will allow the operator to launch both Nulka and passive on combat systems tracks, thereby improving effectiveness. Block 1C is planned to begin at-sea testing before the end of the FYDP.

The next Block upgrade (Block 2) will lay the groundwork for more significant improvements; including a major receiver upgrade to improve system sensitivity, provide precision measurement of Angle of Arrival, and improve Electromagnetic Interference (EMI) immunity. Block 3 will significantly improve the Electronic Attack (EA) capabilities of the SLQ-32; Block 4 will add an Infrared (IR) jamming capability.

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Exhibit R-2a, RDTEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL)	PROJECT NUMBER AND NAME K0954/K9244/K9245 Shipboard EW Improvements		

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	2.288	1.194	0.511	0.409
Current BES/President's Budget	7.068	37.502	33.228	26.074
Total Adjustments	4.780	36.308	32.717	25.665
Summary of Adjustments				
SBIR/STTR Transfer	-0.052			
Congressional Increases		11.300		
Congressional Reductions	-0.011	-0.144		
Program Adjustments	4.843	25.559	34.000	26.500
Inflation		-0.407	-0.758	-0.555
Minor Pricing Adjustments			-0.525	-0.280
Subtotal	4.780	36.308	32.717	25.665

Schedule:

See attached schedule.

Technical:

See attached Schedule

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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN BA-2 AN/SLQ-32(V) (2312)	1.929	1.819	19.429	18.929	22.295	28.248	25.486	21.635	cont.	cont
RDT&E,N BA-5, AIEWS (0604755N)	2.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.018
O&M,N AN/SLQ-32 (12CR0/1C2C)	1.218	1.375	1.445	1.477	1.507	1.540	1.577	1.615	cont	cont
O&M,N AN/SLQ-32 (14DR0/1D4D)	6.331	8.74	8.05	8.222	7.269	7.201	7.331	7.504	cont	cont

E. ACQUISITION STRATEGY:

Shipboard EW Improvement Program(SEWIP) will accomplish block upgrades based on integrating technology advances and added functional capabilities in an incremental fashion. Each block will be developed and contracted in an individual yet coordinated and overlapping fashion. Blocks will be fielded on ships to meet battle group schedule requirements and make best use of available improvements and resources.

F. MAJOR PERFORMERS:

Northrop Grumman PRB (Compete) Goleta, CA - ESE development contract - 7/02
 DSR Fairfax, VA - ICAD development contract - 7/02; Systems Integration Contract - 01/03
 Lockheed Martin/Eagan MN - Q-70 console modifications
 Naval Research Laboratory DC - Technical support for development and testing efforts
 Naval Surface Warfare Center Dahlgren VA - Scenario/Library Testing of ESE, support for all DT/OT events
 Naval Surface Warfare Center Crane IN - Lead for HW/SW ESE development, support for all DT/OT events, system engineering support for ESE and ICAD

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDTE&E, N / BA-5			0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL			K0954/K9244/K9245 Shipboard EW Improvements						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Ancillary Hardware Development			151.420								151.420	
ESE Development	SS / FFP	Northrop Grumman	2.950	2.277	08/02	0.300	10/03			CONT	CONT	TBD
ESE Development	SS / CPF	Northrop Grumman								TBD	TBD	TBD
ICAD Development-SBIR Phase III	SS / CPA	DSR	0.973	5.171	06/02					TBD	TBD	TBD
System Integrator	SS / CPA	DSR		10.654	01/03	7.750		6.409		TBD	TBD	TBD
SSESM rehost/HGHS		NRL								TBD	TBD	N/A
Q-70 Mods		PMS 440		1.000	01/03					TBD	TBD	
Blk 1B Deveop	CPAF	TBD				2.889		1.739		CONT	CONT	
Blk 1C Development	Various	Various				3.297		6.059			9.356	
											0.000	
Award Fees											0.000	
Subtotal Product Development			155.343	19.102		14.236		14.207		Cont	Cont	
Remarks:												
Integrated Logistics Support	Various	Various	0.610	0.916		2.553		1.085			5.164	
Systems Engineering	TBD	Various	1.384	2.518		1.770					5.672	
Blk 1B Engr Services	Various	Various		2.895		1.230		2.000			6.125	
Tech Engrg Svcs, Studies & Analyses	Various	Various	0.557	1.668		1.600		1.700		CONT	TBD	
Blk1C Engr Services	Various	Various		0.500		1.800		1.650			TBD	
Miscellaneous	Various	Various										
Subtotal Support			2.551	8.497		8.953		6.435		Cont	Cont	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
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RDTE, N / BA-5			0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL			K0954/K9244/K9245 Shipboard EW Improvements						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various	8.958								8.958	
Block 1A Test Planning/T&E Events	Various	Various		4.620	01/03	4.985	11/03	1.900	-	CONT	TBD	
Block 1B Test Planning/T&E Events	Various	Various		0.000		0.000		0.025		CONT	TBD	
Block 1C Test Planning/T&E Events										CONT	TBD	
											TBD	
											0.000	
											0.000	
Subtotal T&E			8.958	4.620		4.985		1.925		CONT	CONT	
Remarks:												
Program Management Support	Various	Various	21.785	0.732		0.300		0.300		CONT	CONT	
Government Engineering Support	WX	NSWC/CD & DD, NRL	0.000	3.256		3.089		2.407		CONT	CONT	
Program Management Support	WX	NSWC/CD & DD, NRL	0.454	1.195		1.265		0.700		CONT	CONT	
Travel			0.005	0.100		0.400		0.100		CONT	CONT	
Subtotal Management			22.244	5.283		5.054		3.507		CONT	CONT	
Remarks:												
Total Cost			189.096	37.502		33.228		26.074		CONT	CONT	
Remarks:												

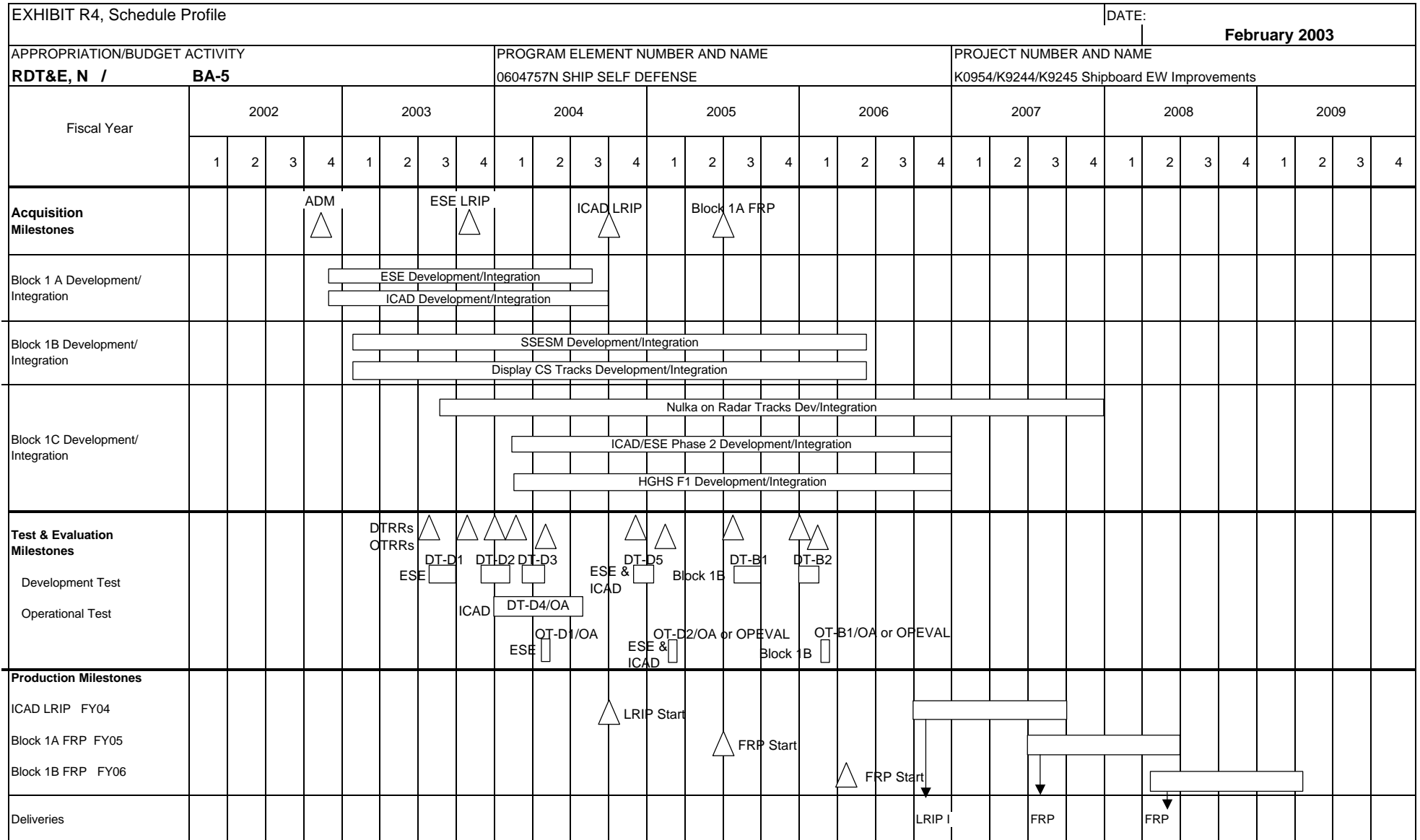
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Exhibit R-3, Project Cost Analysis
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Exhibit R-4, Schedule Profile
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Exhibit R-4a, Schedule Detail						DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME			
RDT&BA-5	0604757N SHIP SELF DEFENSE				K0954/K9244/K9245 Shipboard EW Improvements			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
SEWIP Acquisition Decision Memorandum	4Q							
ESE Development/Integration	4Q	1Q-4Q	1Q-3Q					
ICAD Development/Integration	4Q	1Q-4Q	1Q-3Q					
SSESM Development/Integration		1Q-4Q	1Q-4Q	1Q-4Q	1Q-2Q			
Display CS Tracks Development/Integration		1Q-4Q	1Q-4Q	1Q-4Q	1Q-2Q			
Developmental Test Readiness Review (ESE)		3Q						
ESE Developmental Testing (DT-D1)		3Q						
Development Test Readiness Review (ESE)		4Q						
ESE Developmental Testing (DT-D2)		4Q	1Q					
ESE LRIP		4Q						
Developmental Test Readiness Review (ESE)			1Q					
ESE Developmental Testing (DT-D3)			1Q-2Q					
Developmental Test Readiness Review (ICAD)			1Q					
ICAD/ESE Phase 2 Development/Integration			1Q-4Q	1Q-4Q	1Q-4Q			
HGHS F1 Development/Integration			1Q-4Q	1Q-4Q	1Q-4Q			
Operational Test Readiness Review (ESE)			2Q					
ESE Operational Test (OA) (OT-D1)			2Q					
ICAD LRIP			4Q					
Development Test Readiness Review (ESE & ICAD)			4Q					
ESE & ICAD Developmental Test (DT-D5)			4Q	1Q				
Operational Test Readiness Review (ESE & ICAD)				1Q				
ESE & ICAD Operational Test (OA) (OT-D2)				1Q				
Nulka on Radar Tracks Development/Integration		3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
Block 1A FRP				2Q				
Developmental Test Readiness Review (Block 1B)				3Q				
Block 1B Developmental Test (DT-B1)				3Q				
Developmental Test Readiness Review (Block 1B)				4Q				
Block 1B Developmental Test (DT-B2)					1Q			
Operational Test Readiness Review (Block 1B)					1Q			
Block 1B Operational Test (OA) (OT-B1)					1Q			

R-1 SHOPPING LIST - Item No. 133

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 11 of 24)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL)				PROJECT NUMBER AND NAME K2190/K2441/Nulka Decoy			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	4.217	5.491	2.280	2.492	1.032	1.045	1.062	1.081
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Offboard Active Decoy (NULKA) is a joint cooperative program between the United States and Australia that developed an active offboard decoy that utilizes a broadband radio frequency repeater mounted atop a hovering rocket. NULKA is designed to counter a wide variety of present and future radar guided Anti-Ship Missiles by radiating a large radar cross section while flying a ship-like trajectory. The United States developed the electronic payload and fire control system, while Australia developed the hovering rocket. Currently NULKA is undergoing a P3I program to: integrate the Mk 53 Decoy Launching System with Ship Self Defense System (SSDS) and the ship combat systems, maintain electromagnetic compatibility with shipboard emitters, integrate with future electronic warfare system upgrades, and upgrade of the Inertial Measurement Unit (IMU). It is critical to maintain a continuous RDT&E budget for payload and decoy system modifications and testing. This will ensure we provide the fleet with a proven and effective capability that they can have complete confidence in when called on to go in harms way.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KIL	PROJECT NUMBER AND NAME K2190/K2441/Nulka Decoy																	
B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.990</td><td></td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Start development of Radar Designed Decoy Launch (RDDL) capability.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.990				RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.990																		
RDT&E Articles Quantity																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	3.227	1.000	1.300	1.500															
RDT&E Articles Quantity																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost		1.000	0.980																
RDT&E Articles Quantity																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KIL	PROJECT NUMBER AND NAME K2190/K2441/Nulka Decoy																	
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost				0.992															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px;">Develop Decoy Launch Processor (DLP)/Decoy Launch System (DLS) technology refresh.</div>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td style="text-align: center;">3.491</td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost		3.491			RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost		3.491																	
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px;">NULKA decoy subsystem/integration and improvements.</div>																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																																																								
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL)	PROJECT NUMBER AND NAME K2190/K2441/Nulka Decoy																																																									
<p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;"></th> <th style="text-align: right; width: 15%;">FY 2002</th> <th style="text-align: right; width: 15%;">FY 2003</th> <th style="text-align: right; width: 15%;">FY 2004</th> <th style="text-align: right; width: 15%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Previous President's Budget: (FY 03 Pres Controls)</td> <td style="text-align: right;">0.526</td> <td style="text-align: right;">1.015</td> <td style="text-align: right;">1.083</td> <td style="text-align: right;">1.080</td> </tr> <tr> <td>Current BES/President's Budget: (FY04/05 OSD/OMB Controls)</td> <td style="text-align: right;">4.217</td> <td style="text-align: right;">5.491</td> <td style="text-align: right;">2.280</td> <td style="text-align: right;">2.492</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">3.691</td> <td style="text-align: right; border-top: 1px solid black;">4.476</td> <td style="text-align: right; border-top: 1px solid black;">1.197</td> <td style="text-align: right; border-top: 1px solid black;">1.412</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td>Minor Pricing Adjustments</td> <td style="text-align: right;">-0.049</td> <td style="text-align: right;">-0.064</td> <td style="text-align: right;">-0.051</td> <td style="text-align: right;">-0.034</td> </tr> <tr> <td>Program Adjustments</td> <td style="text-align: right;">0.940</td> <td></td> <td style="text-align: right;">1.300</td> <td style="text-align: right;">1.500</td> </tr> <tr> <td>Inflation</td> <td></td> <td style="text-align: right;">-0.060</td> <td style="text-align: right;">-0.052</td> <td style="text-align: right;">-0.054</td> </tr> <tr> <td>Congressional increases</td> <td style="text-align: right;">2.800</td> <td style="text-align: right;">4.600</td> <td></td> <td></td> </tr> <tr> <td>Subtotal</td> <td style="text-align: right;">3.691</td> <td style="text-align: right;">4.476</td> <td style="text-align: right;">1.197</td> <td style="text-align: right;">1.412</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">Not Applicable</p> <p>Technical:</p> <p style="margin-left: 20px;">Not Applicable</p>						FY 2002	FY 2003	FY 2004	FY 2005	Funding:					Previous President's Budget: (FY 03 Pres Controls)	0.526	1.015	1.083	1.080	Current BES/President's Budget: (FY04/05 OSD/OMB Controls)	4.217	5.491	2.280	2.492	Total Adjustments	3.691	4.476	1.197	1.412	Summary of Adjustments					Minor Pricing Adjustments	-0.049	-0.064	-0.051	-0.034	Program Adjustments	0.940		1.300	1.500	Inflation		-0.060	-0.052	-0.054	Congressional increases	2.800	4.600			Subtotal	3.691	4.476	1.197	1.412
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R-1 SHOPPING LIST - Item No. 133

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			PROGRAM ELEMENT NUMBER AND NAME 0604757N SHIP SELF DEFENSE			PROJECT NUMBER AND NAME K2190/K2441 NULKA DECOY				

D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN: Anti-Ship Missile Decoy System/5530 (In Millions)	26.923	32.675	44.757	56.311	56.937	58.229	59.352	60.736	231.794	752.552
Spares	0.200	0.200	0.152	0.158	0.180	0.248	0.073	0.000	Continuing	TBD
OMN: 14DRO, 1D4D	3.047	1.990	2.291	2.776	2.755	2.833	2.900	2.970	Continuing	TBD*

* Total Cost does not include FY01 and prior program program costs of \$124,829

E. ACQUISITION STRATEGY:

Not Applicable

F. MAJOR PERFORMERS:

NSWC Crane , IN Product Development
 NSWC Dahlgren, VA Product Development
 NRL Washington, DC Product Development
 Sippican Inc, Marion, MA Product Development
 BAeA, Australia Product Development

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-5			PROGRAM ELEMENT 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL			PROJECT NUMBER AND NAME K2190/K2441/Nulka Decoy						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	RC	NSWC Crane, IN	1.000	2.373							3.373	
	RC	Sippican	1.782								1.782	
	MIPR	BAES	0.100	0.600		1.300	Nov-04	1.500	Nov-05	Continuing	Continuing	
Ship Suitability											0.000	
Systems Engineering	WX	NSWC Crane	0.223	0.231		0.209		0.210		Continuing	Continuing	
Systems Engineering	WX	NWAD China Lake		0.050								
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			3.105	3.254		1.509		1.710		Continuing	Continuing	
Remarks:												
Development Support	WX	NRL	0.375	0.765		0.257		0.263		Continuing	Continuing	
Software Development	WX	NSWC Dahlgren	0.557	1.205		0.209		0.210		Continuing	Continuing	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.932	1.970		0.466		0.473		Continuing	Continuing	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 17 of 24)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-5			PROGRAM ELEMENT 0604757N SHIP SELF DEFENSE (ENGAGE: SOFT KILL			PROJECT NUMBER AND NAME K2190/K2441/Nulka Decoy						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	cc/cpff	Anteon, Arlington, VA	0.076	0.185	10/02	0.199	10/03	0.202	10/04	Continuing	Continuing	
Travel			0.104	0.082		0.106		0.107		Continuing	Continuing	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.180	0.267		0.305		0.309		Continuing	Continuing	
Remarks:												
Total Cost			4.217	5.491		2.280		2.492		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 133

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 18 of 24)

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-5												0604757N SHIP SELF DEFENSE												K2190/K2441 NULKA DECOY											
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Acquisition Milestones																																			
Production Milestones																																			
Test & Evaluation Milestones																																			
Development Test																																			
Operational Test																																			
Deliveries																																			

R-1 SHOPPING LIST - Item No 133

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Exhibit R-4, Schedule Profile
(Exhibit R-4, page 19 of 24)

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CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 133

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 20 of 24)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: FEBRUARY 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604755N SHIP SELF DEFENSE (DETECT & CONTROL)				PROJECT NUMBER AND NAME K9243/Radar Tiles			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	0.000	0.977	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(u) MISSION DESCRIPTION AND BUDGET ITEM JUTIFICATION: OUTLAW BANDIT is a ship signature reduction program, applying radar absorbent material (RAM) to selected areas of a ship's equipment, superstructure, and weapons systems. PCMS enhances ship survivability when used in conjunction with AN/SLQ-32 AND Decoys.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604755N SHIP SELF DEFENSE (DETECT & CONTRO	PROJECT NUMBER AND NAME K9243/Radar Tiles		
B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.977	0.000	0.000
RDT&E Articles Quantity				
Develop an advanced radar absorbing material				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

R-1 SHOPPING LIST - Item No.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 22 of 24)

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DATE:	August 2002	February 2003
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R-1 SHOPPING LIST - Item No. 133

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003																																			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604755N SHIP SELF DEFENSE (DETECT & CONTROL			PROJECT NUMBER AND NAME K9243/Radar Tiles																																					
<p>D. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Line Item No. & Name</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>FY 2006</u></th> <th style="text-align: center;"><u>FY 2007</u></th> <th style="text-align: center;"><u>FY 2008</u></th> <th style="text-align: center;"><u>FY 2009</u></th> <th style="text-align: center;"><u>To Complete</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>O&M,N ELECTRONIC WARFARE PE 0728827</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OUTLAW BANDIT</td> <td></td> <td style="text-align: center;">2.618</td> <td style="text-align: center;">1.358</td> <td style="text-align: center;">1.427</td> <td style="text-align: center;">1.442</td> <td style="text-align: center;">1.588</td> <td style="text-align: center;">1.669</td> <td style="text-align: center;">1.704</td> <td></td> <td></td> </tr> </tbody> </table>										<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>	O&M,N ELECTRONIC WARFARE PE 0728827											OUTLAW BANDIT		2.618	1.358	1.427	1.442	1.588	1.669	1.704		
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>																																
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OUTLAW BANDIT		2.618	1.358	1.427	1.442	1.588	1.669	1.704																																		
<p>E. ACQUISITION STRATEGY: n/a</p>																																										
<p>F. MAJOR PERFORMERS: n/a</p>																																										

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